

23.1(455B) Emission standards.

23.1(1) *In general.* The federal standards of performance for new stationary sources (new source performance standards) shall be applicable as specified in subrule 23.1(2). The federal standards for hazardous air pollutants (national emissions standards for hazardous air pollutants) shall be applicable as specified in subrule 23.1(3). Compliance with emission standards specified elsewhere in this chapter shall be in accordance with 567—Chapter 21.

23.1(5) *Emission guidelines.* The emission guidelines and compliance times for existing sources, as defined in 40 Code of Federal Regulations Part 60 as amended through July 23, 2001, shall apply to the following affected facilities. The corresponding 40 CFR Part 60 subpart designation is in parentheses. The control of the designated pollutants will be in accordance with federal standards established in Sections 111 and 129 of the Act and 40 CFR Part 60, Subpart B (Adoption and Submittal of State Plans for Designated Facilities), and the applicable subpart(s) for the existing source. Reference test methods (Appendix A), performance specifications (Appendix B), determination of emission rate change (Appendix C), quality assurance procedures (Appendix F) and the general provisions (Subpart A) of 40 CFR Part 60 also apply to the affected facilities.

a. Emission guidelines for municipal solid waste landfills (Subpart Cc). Emission guidelines and compliance times for the control of certain designated pollutants from designated municipal solid waste landfills shall be in accordance with federal standards established in Subparts Cc (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) and WWW (Standards of Performance for Municipal Solid Waste Landfills) of 40 CFR Part 60.

(1) *Definitions.* For the purpose of 23.1(5) "a," the definitions have the same meaning given to them in the Act and 40 CFR Part 60, Subparts A (General Provisions), B, and WWW, if not defined in this subparagraph.

"*Municipal solid waste landfill*" or "*MSW landfill*" means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes such as commercial solid waste, nonhazardous sludge, and industrial solid waste. Portions of an MSW landfill may be separated by access

567-23.1

roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill or a lateral expansion.

(2) Designated facilities.

1. The designated facility to which the emission guidelines apply is each existing MSW landfill for which construction, reconstruction or modification was commenced before May 30, 1991.

2. Physical or operational changes made to an existing MSW landfill solely to comply with an emission guideline are not considered a modification or reconstruction and would not subject an existing MSW landfill to the requirements of 40 CFR Part 60, Subpart WWW (40 CFR 60.750).

3. For MSW landfills subject to 567-subrule 22.101(1) only because of applicability to subparagraph 23.1(5)"a"(2), the following apply for obtaining and maintaining a Title V operating permit under 567-22.104(455B):

The owner or operator of an MSW landfill with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not required to obtain an operating permit for the landfill.

The owner or operator of an MSW landfill with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters on or before June 22, 1998, becomes subject to the requirements of 567-subrule 22.105(1) on September 20, 1998. This requires the landfill to submit a Title V permit application to the Air Quality Bureau, Department of Natural Resources, no later than September 20, 1999.

The owner or operator of a closed MSW landfill does not have to maintain an operating permit for the landfill if either of the following conditions are met: the landfill was never subject to the requirement for a control system under subparagraph 23.1(5)"a"(3); or the owner or operator meets the conditions for control system removal specified in 40 CFR § 60.752(b)(2)(v).

(3) Emission guidelines for municipal solid waste landfill emissions.

1. MSW landfill emissions at each MSW landfill meeting the conditions below shall be controlled. A design capacity report must be submitted to the director by November 18, 1997.

The landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.

The landfill has a design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. All calculations used to determine the maximum design capacity must be included in the design capacity report.

The landfill has a nonmethane organic compound (NMOC) emission rate of 50 megagrams per year or more. If the MSW landfill's design capacity exceeds the established thresholds in 23.1(5) "a"(3)"1," the NMOC emission rate calculations must be provided with the design capacity report.

2. The planning and installation of a collection and control system shall meet the conditions provided in 40 CFR 60.752(b)(2) at each MSW landfill meeting the conditions in 23.1(5) "a"(3)"1."

3. MSW landfill emissions collected through the use of control devices must meet the following requirements, except as provided in 40 CFR 60.24 after approval by the Director and U.S. Environmental Protection Agency.

An open flare designed and operated in accordance with the parameters established in 40 CFR 60.18; a control system designed and operated to reduce NMOC by 98 weight percent; or an enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, dry basis at 3 percent oxygen, or less.

(4) Test methods and procedures. The following must be used:

1. The calculation of the landfill NMOC emission rate listed in 40 CFR 60.754, as applicable, to determine whether the landfill meets the condition in 23.1(5) "a"(3)"3";

567-23.1

2. The operational standards in 40 CFR 60.753;
3. The compliance provisions in 40 CFR 60.755; and
4. The monitoring provisions in 40 CFR 60.756.

(5) Reporting and record-keeping requirements. The record-keeping and reporting provisions listed in 40 CFR 60.757 and 60.758, as applicable, except as provided under 40 CFR 60.24 after approval by the Director and U.S. Environmental Protection Agency, shall be used.

(6) Compliance times.

1. Except as provided for under 23.1(5) "a"(6)"2," planning, awarding of contracts, and installation of MSW landfill air emission collection and control equipment capable of meeting the emission guidelines established under 23.1(5) "a"(3) shall be accomplished within 30 months after the date the initial NMOC emission rate report shows NMOC emissions greater than or equal to 50 megagrams per year.

2. For each existing MSW landfill meeting the conditions in 23.1(5) "a"(3)"1" whose NMOC emission rate is less than 50 megagrams per year on August 20, 1997, installation of collection and control systems capable of meeting emission guidelines in 23.1(5) "a"(3) shall be accomplished within 30 months of the date when the condition in 23.1(5) "a"(3)"1" is met (i.e., the date of the first annual nonmethane organic compounds emission rate which equals or exceeds 50 megagrams per year).

b. *Emission guidelines for hospital/medical/infectious waste incinerators (Subpart Ce).* This paragraph contains emission guidelines and compliance times for the control of certain designated pollutants from hospital/medical/infectious waste incinerator(s) (HMIWI) in accordance with Subparts Ce and Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators) of 40 CFR Part 60.

(1) Definitions. For the purpose of paragraph 23.1(5) "b," the definitions have the same meaning given to them in the Act and 40 CFR Part 60, Subparts A, B, and Ec, if not defined in this subparagraph.

"Hospital/medical/infectious waste incinerator" or "HMIWI" means any device that combusts any amount or combination of hospital or medical/infectious waste.

"Hospital waste" means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

"Large HMIWI" means:

1. An HMIWI whose maximum design waste burning capacity is more than 500 pounds per hour; or
2. A continuous or intermittent HMIWI whose maximum charge rate is more than 500 pounds per hour; or
3. A batch HMIWI whose maximum charge rate is more than 4,000 pounds per day.

"Medical/infectious waste" means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in numbered paragraphs "1" through "7" of this definition. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR Part 261; household waste, as defined in 40 CFR § 261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in 40 CFR § 261.4(a)(1).

1. Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

2. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy or other medical procedures, and specimens of body fluids and their containers.

3. Human blood and blood products including: liquid waste human blood, products of blood, items saturated or dripping with human blood; or items that were saturated or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category.

4. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

5. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals.

6. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or from isolated animals known to be infected with highly communicable diseases.

7. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

"Medium HMIWI" means:

1. An HMIWI whose maximum design waste burning capacity is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or

2. A continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or

3. A batch HMIWI whose maximum charge rate is more than 1,600 pounds per day but less than or equal to 4,000 pounds per day.

"Remote HMIWI" means a small HMIWI meeting the following conditions:

1. Located 50 miles from the boundary of the nearest standard metropolitan statistical area (SMSA). The SMSA boundary is established by the political borders of the counties, provided in the definition of an SMSA, which are listed in parentheses.

2. Burns less than 2,000 lb/week of hospital waste and medical/infectious waste.

"Small HMIWI" means:

1. An HMIWI whose maximum design waste burning capacity is less than or equal to 200 pounds per hour; or

2. A continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour; or

3. A batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day.

"Standard metropolitan statistical area" or "SMSA" means any areas listed in OMB Bulletin No. 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" dated June 30, 1993. The following SMSAs are in Iowa or within 50 miles of Iowa border: Cedar Rapids (Linn County, IA), Davenport-Moline-Rock Island (Henry County, IL; Rock Island County, IL; Scott County, IA), Des Moines (Dallas County, Polk County, Warren County), Dubuque (Dubuque County), Iowa City (Johnson County), La Crosse (Houston County, MN; La Crosse County, WI), Omaha-Council Bluffs (Cass County, NE; Douglas County, NE; Pottawattamie County, IA; Sarpy County, NE; Washington County, NE), Rochester (Olmsted County, MN), St. Joseph (Andrew County, MO; Buchanan County, MO), Sioux City (Dakota County, NE; Woodbury County, IA), Sioux Falls (Lincoln County, SD; Minnehaha County, SD), and Waterloo-Cedar Falls (Black Hawk County).

(2) Designated facilities.

1. Except as provided in numbered paragraphs "2" through "8" of this subparagraph, the designated facility to which the

567-23.1

guidelines apply is each individual HMIWI for which construction was commenced on or before June 20, 1996.

2. A combustor is not subject to this paragraph during periods when only pathological waste, low-level radioactive waste, or chemotherapeutic waste, or any combination thereof, (defined in 40 CFR § 60.51c) is burned, provided the owner or operator of the combustor does the following: notifies the director of an exemption claim, and keeps records on a calendar-quarter basis of the periods of time when only pathological waste, low-level radioactive waste, or chemotherapeutic waste, or any combination thereof, is burned.

3. Any co-fired combustor (defined in 40 CFR § 60.51c) is not subject to this paragraph if the owner or operator of the co-fired combustor notifies the director of an exemption claim; provides an estimate of the relative weight of hospital waste, medical/infectious waste, other fuels, and other wastes to be combusted; and keeps records on a calendar-quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor.

4. Any combustor required to have a permit under Section 3005 of the Solid Waste Disposal Act is not subject to paragraph 23.1(5) "b."

5. Any combustor which meets the applicability requirements under Subpart Cb, Ea, or Eb of 40 CFR Part 60 is not subject to paragraph 23.1(5) "b."

6. Any pyrolysis unit (defined in 40 CFR § 60.51c) is not subject to paragraph 23.1(5) "b."

7. Cement kilns firing hospital or medical/infectious waste, or any combination thereof, are not subject to paragraph 23.1(5) "b."

8. Physical or operational changes made to an existing HMIWI unit solely for the purpose of complying with paragraph 23.1(5) "b" are not considered a modification and do not result in an existing HMIWI becoming subject to the provisions of 40 CFR Part 60, Subpart Ec.

9. The Title V operating permit requirements, as stated in 567-subrule 22.101(1), are applicable to designated facilities

subject to paragraph 23.1(5)"b." They must apply for an operating permit as specified by 567-subrule 22.105(1) no later than September 15, 2000.

(3) Emission limits.

1. An HMIWI must not exceed the emission limits for each pollutant listed in Table 1, except as provided for in numbered paragraph "2" of subparagraph 23.1(5)"b"(3).

2. A remote HMIWI must not exceed the emission limits for each pollutant listed in Table 2. The 2,000 lb/week limitation does not apply during performance tests.

3. On or after the date on which the initial performance test is completed or is required to be completed under 40 CFR Section 60.8, whichever comes first, no owner or operator of an affected facility shall cause any gases to be discharged into the atmosphere from the stack of the affected facility that exhibit greater than 10 percent opacity (6-minute block average).

Table 1. Emission Limits for Small, Medium, and Large HMIWI

Pollutant/Units (7 percent oxygen, dry basis)	Emission Limits for HMIWI Size		
	Small	Medium	Large
Particulate matter			
Milligrams per dry standard cubic meter (grains per dry standard cubic foot)	115 (0.05)	69 (0.03)	34 (0.015)
Carbon monoxide			
Parts per million by volume	40	40	40
Dioxins/furans			
Nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet), or	125 (55)	125 (55)	125 (55)
Nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	2.3 (1.0)	2.3 (1.0)	2.3 (1.0)
Hydrogen chloride			
Parts per million by volume, or	100	100	100
Percent reduction	93	93	93
Sulfur dioxide			
Parts per million by volume	55	55	55
Nitrogen oxides			
Parts per million by volume	250	250	250
Lead			
Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet), or	1.2 (0.52)	1.2 (0.52)	1.2 (0.52)
Percent reduction	70	70	70
Cadmium			
Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet), or	0.16 (0.07)	0.16 (0.07)	0.16 (0.07)
Percent reduction	65	65	65
Mercury			
Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet), or	0.55 (0.24)	0.55 (0.24)	0.55 (0.24)
Percent reduction	85	85	85

Table 2. Emissions Limits for Remote HMIWI

Pollutant	Units (7 percent oxygen, dry basis)	Emission Limit
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot)	197 (0.086)
Carbon monoxide	Parts per million by volume	40
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet), or	800 (350)
	Nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	15 (6.6)
Hydrogen chloride	Parts per million by volume	3100
Sulfur dioxide	Parts per million by volume	55
Nitrogen oxides	Parts per million by volume	250
Lead	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	10 (4.4)
Cadmium	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	4 (1.7)
Mercury	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	7.5 (3.3)

(4) Operator training and qualification requirements. Designated facilities shall meet the requirements for operator training and qualification listed in 40 CFR § 60.53c by August 16, 2000 (which is one year from EPA's approval of the state's 111(d) plan for HMIWI).

(5) Waste management requirements. Designated facilities shall meet the requirements for a waste management plan listed in 40 CFR § 60.55c by June 16, 2002 (which is 34 months from EPA's approval of the state's 111(d) plan for HMIWI).

(6) Inspection requirements. Each remote HMIWI subject to the emission limits under numbered paragraph "2" of subparagraph 23.1(5)"b"(3) must conduct an initial equipment inspection by August 16, 2000 (which is one year from EPA's approval of the state's 111(d) plan for HMIWI), and perform equipment inspections annually, no more than 12 months after the previous inspection. The facility must complete all necessary repairs within ten operating days following an inspection. If the repairs cannot be accomplished within this period, then the owner or operator must obtain written approval from the department requesting an extension. All inspections shall include the following:

1. Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation, and clean pilot flame sensor as necessary;

2. Ensure proper adjustment of primary and secondary chamber combustion air, and adjust as necessary;

3. Inspect hinges and door latches, and lubricate as necessary;
 4. Inspect dampers, fans, and blowers for proper operation;
 5. Inspect HMIWI door and door gaskets for proper sealing;
 6. Inspect motors for proper operation;
 7. Inspect primary chamber refractory lining, and clean and repair or replace lining as necessary;
 8. Inspect incinerator shell for corrosion and hot spots;
 9. Inspect secondary/tertiary chamber and stack, and clean as necessary;
 10. Inspect mechanical loader, including limit switches, for proper operation, if applicable;
 11. Visually inspect waste bed (grates), and repair or seal as appropriate;
 12. For the burn cycle that follows the inspection, document that the incinerator is operating properly, and make any necessary adjustments;
 13. Inspect air pollution control device(s) for proper operation if applicable;
 14. Inspect waste heat boiler systems to ensure proper operation if applicable;
 15. Inspect bypass stack components;
 16. Ensure proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment; and
 17. Generally observe whether the equipment is maintained in good operating condition.
- (7) Compliance, performance testing, and monitoring requirements. Except as provided in subparagraphs 23.1(5)"b"(8) and (9), designated facilities shall meet the requirements for compliance and performance testing listed in 40 CFR § 60.56c (excluding the fugitive emissions testing requirements under

567-23.1

40 CFR § 60.56c(b)(12) and (c)(3)) and the requirements for monitoring listed in 40 CFR § 60.57c.

(8) Compliance and performance testing for remote HMIWI. Remote HMIWI shall meet the following compliance and performance testing requirements:

1. Conduct the performance testing requirements in 40 CFR § 60.56c(a), (b)(1) through (b)(9), (b)(11) (Hg only), and (c)(1). The 2,000 lb/week limitation under numbered paragraph "2" of subparagraph 23.1(5)"b"(3) does not apply during performance tests.

2. Establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits.

3. Following the date on which the initial performance test is completed or is required to be completed under 40 CFR § 60.8, whichever date comes first, remote HMIWI must not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times except during periods of startup, shutdown and malfunction. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s).

4. Except as provided in numbered paragraph "5" of subparagraph 23.1(5)"b"(8), operation of the remote HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emission limits.

5. The owner or operator of the remote HMIWI may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph must be conducted using the identical operating parameters that indicated a violation under numbered paragraph "4" of subparagraph 23.1(5)"b"(8).

(9) Monitoring requirements for remote HMIWI. Remote HMIWI must meet the following monitoring requirements:

1. Install, calibrate (to manufacturers' specifications), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation.

2. Install, calibrate (to manufacturers' specifications), maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI.

3. The owner or operator of a designated facility shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the designated facility is combusting hospital or medical/infectious waste, or a combination thereof.

(10) Reporting and record-keeping requirements. Designated facilities shall meet the reporting and record-keeping requirements listed in 40 CFR § 60.58c(b), (c), (d), (e), and (f), excluding 40 CFR § 60.58c(b)(2)(ii) (fugitive emissions) and (b)(7) (siting), except for remote HMIWI.

(11) Reporting and record-keeping requirements for remote HMIWI. Remote HMIWI must meet the following reporting and record-keeping requirements:

1. Maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within ten days of an inspection; and

2. Submit an annual report containing information recorded under numbered paragraph "1" of subparagraph 23.1(5)"b"(11) no later than 60 days following the year in which data were collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report (once the unit is subject to permitting requirements under Title V of the Act, the owner or operator must submit these reports semiannually). The report shall be signed by the facility's manager.

(12) Compliance times for designated facilities planning to retrofit. Designated facilities planning to retrofit existing HMIWI shall comply with the emission limits specified in subparagraph 23.1(5)"b"(3) by August 16, 2002 (which is three years from EPA's approval of the state's 111(d) plan for HMIWI). To ensure compliance, these facilities must also comply with the following increments of progress:

1. Submit construction permit application to the department, as required by rule 567 - 22.1(455B), to outline the addition of control equipment and the modification of existing processes by August 16, 2000 (which is one year from EPA's approval of the state's 111(d) plan for HMIWI);

2. Award contracts for control systems or process modifications, or orders for purchase of components by February 16, 2001 (which is 18 months from EPA's approval of the state's 111(d) plan for HMIWI);

3. Initiate on-site construction or installation of the air pollution control device(s) or process changes by August 16, 2001 (which is two years from EPA's approval of the state's 111(d) plan for HMIWI);

4. Complete on-site construction or installation of air pollution control device(s) or process changes by May 16, 2002 (which is 33 months from EPA's approval of the state's 111(d) plan for HMIWI); and

5. Complete initial compliance test(s) on the air pollution control equipment by June 16, 2002 (which is 34 months from EPA's approval of the state's 111(d) plan for HMIWI).

(13) Compliance times for designated facilities planning to shut down. Designated facilities planning to shut down an existing HMIWI shall shut down by August 16, 2000 (which is one year from EPA's approval of the state's 111(d) plan for HMIWI). Designated facilities may request an extension from the department to operate the HMIWI for up to two additional years. The request for extension must be submitted to the department by May 16, 2000 (which is nine months from EPA's approval of the state's 111(d) plan for HMIWI) and include the following:

1. Documentation to support the need for the requested extension;

2. An evaluation of the option to transport the waste off site to a commercial medical waste treatment and disposal facility on a temporary or permanent basis; and

3. A plan that documents measurable and enforceable incremental steps of progress to be taken toward compliance with paragraph 23.1(5)"b," including final compliance date which can be no later than September 16, 2002.

23.1(6) *Calculation of emission limitations based upon stack height.* This rule sets limits for the maximum stack height credit to be used in ambient air quality modeling for the purpose of setting an emission limitation and calculating the air quality impact of a source. The rule does not limit the actual physical stack height for any source.

For the purpose of this subrule, definitions of "stack," "a stack in existence," "dispersion technique," "nearby" and "excessive concentration" as set forth in 40 CFR §§51.100(ff) through (hh), (jj) and (kk) as amended through June 14, 1996, are adopted by reference.

a. "Good engineering practice (GEP) stack height" means the greater of:

(1) Sixty-five meters, measured from the ground level elevation at the base of the stack; or

(2) For stacks in existence on January 12, 1979, and for which the owner and operator had obtained all applicable permits or approvals required under 567—Chapter 22 and 40 CFR §52.21 as amended through March 12, 1996,

$$H_g = 2.5H$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

For all other stacks,

$$H_g = H + 1.5L$$

where:

H_g = good engineering practice stack height, measured from the ground level elevation at the base of the stack,

567-23.1

H = height of nearby structure(s) measured from the ground level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structure(s), provided that the department may require the use of a field study or fluid model to verify GEP stack height for the source; or

(3) The height demonstrated by a fluid model or a field study approved by the department, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features. Public notification of the availability of such study and opportunity for public hearing are required prior to approval by the department.

b. The degree of emission limitation required for control of any air contaminant under this chapter shall not be affected in any manner by:

(1) The consideration of that portion of a stack which exceeds GEP stack height; or

(2) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

(3) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combined exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase gas plume rise.

This rule is intended to implement Iowa Code section 455B.133.

[illegible]

CFR: 40 C.F.R. 52.820 (47) (i) (A)

FRM: 53 FR 41600 (10/24/88)

PRM: 52 FR 33437 (9/3/87)

State Submission: 5/20/86

State Proposal: 1/15/86 (ARC 6280)

State Final: 4/22/86 (ARC 6566) (Effective 6/25/86)

APDB File: IA-25

Description:	This revision adopted by reference those Federal rules necessary to implement the stack height calculations, modified the definition of good engineering practice, and included Federally mandated public notification requirements. This amendment affected section 23.1(4).
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[illegible]

CFR: 40 C.F.R. 52.820 (c) (52) (i) (B)

FRM: 55 FR 26690 (6/29/90)

PRM: None

State Submission: 5/7/90

State Proposal: IAB 11/15/89 (ARC 412A)

State Final: IAB 2/7/90 (ARC 658A) (Effective 3/14/90)

APDB File: IA-32

Description: This rulemaking recodified chapters 20-29. It was Water, Air and Waste Management (900) and is now Environmental Protection Commission (567).

[illegible]

CFR: 40 C.F.R. 62.3913

FRM: 63 FR 20102 4/23/98

PRM: 63 FR 20159 4/23/98

State Submission: 12/22/97

State Proposal: IAB 3/12/97 1472

State Final: IAB 7/16/97 208

APDB File: IA-63

Description: This rule is the EPA approval of Iowa's section 111(d) plan for the control of landfill gas from existing municipal solid waste landfills, except those located in Indian Country.

[illegible]

PRM: 63 FR 34618 (6/25/98)

State Proposal: IAB 3/12/97

APDB File: IA-58

[illegible]

FRM: 64 FR 17548 (4/12/99) and 65 FR 32030 (5/22/00) (correction)

State Submission: 8/12/98

State Final: IAB 4/8/98

Description: This revision updates the reference to 40 C.F.R. Part 51 and 40 C.F.R. Part 52, and corrects a reference to a rule citation.

[illegible]

FRM: 64 FR 32425 (6/17/99)

State Submission: 2/11/99

State Proposal: 3/16/98

State Final: IAB 8/26/98

APDB File: IA-70

Description: This revision adds a revised paragraph 23.1-5(a) and new paragraph 23.1-5(b).

[illegible]


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CFR:      40 C.F.R. 62.3840
FRM:      68 FR 40531 (07/08/2003)
PRM:      68 FR 40618 (07/08/2003)

State Submission:      04/25/2002
State Proposal:        IAB 12/12/01
State Final:           IAC 03/20/02
State Effective Date:  04/24/02
APDB File:             IA-100

Description:            This revision updates the 40 CFR part 60 reference date from November 24,
                        1998, to July 23, 2001.
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Difference Between the State and EPA-Approved Regulation:

Sections 23.1(2)-(5) are not approved in the SIP. Section 23.1(5) is approved as part of the 111(d) plan.